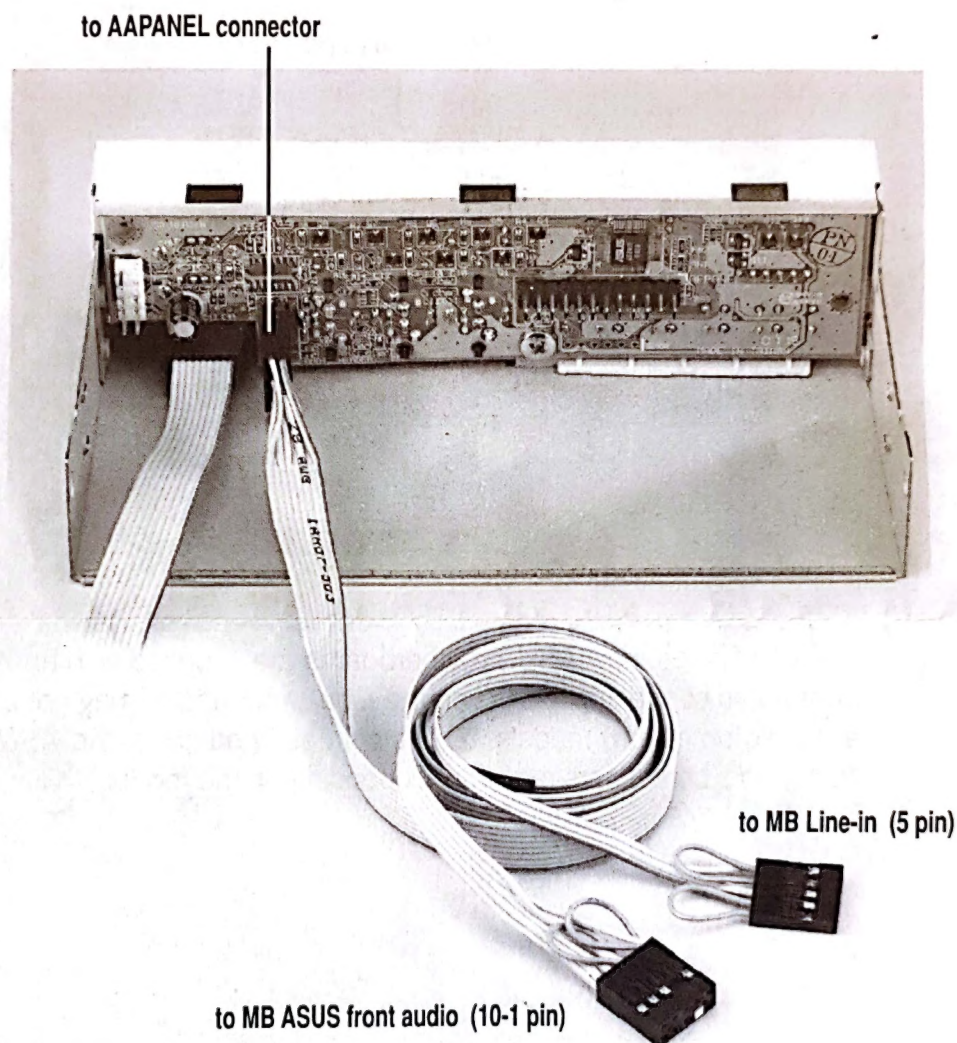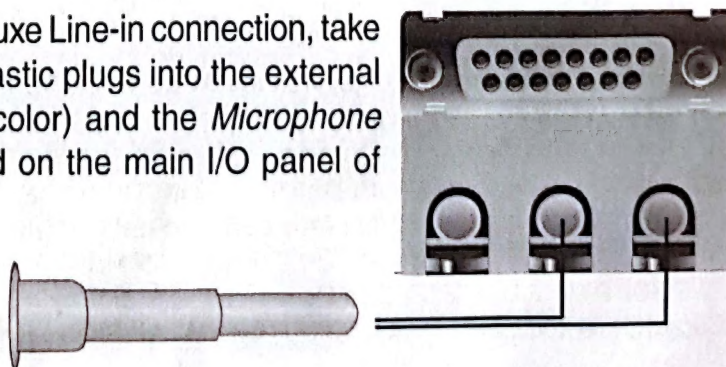# /ISUS iPanel Deluxe

Cable Specification Updates

This insert updates the connector specifications for the iPanel Deluxe unit. In addition to the original specifications, the iPanel Deluxe is now provided with a new dual purpose **Line-in / front audio** cable to connect to the *line-in* connector and the *ASUS front audio* headers on the motherboard:

to AAPANEL connector

to MB Line-in (5 pin)

to MB ASUS front audio (10-1 pin)

When using IPANEL Deluxe Line-in connection, take care to insert the two plastic plugs into the external *Line-in jack* (light blue color) and the *Microphone jack* (pink), both located on the main I/O panel of each motherboard.
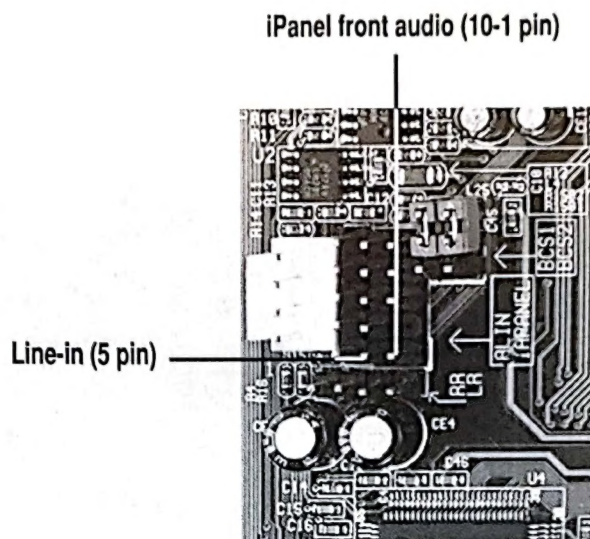
15-060134000

ASUS iPanel Deluxe

Making Connections:

The *line-in* connector (LINE_IN or ALIN) and the ASUS *front audio* connector (IPANEL, IAPANEL or AAPANEL) are usually mounted next to each other. Locate the connectors and plug both ends of the *Line-in / front audio* cable to the motherboard.

iPanel front audio (10-1 pin)

Line-in (5 pin)

NOTE! 1. Most new ASUS motherboards are supplied with an *ASUS front audio* connector. However, the *Line-in* connector may not be available on all new models. 2. The connector name for the *ASUS front audio* connectors may vary depending on the model.

For updated processor settings, visit the ASUS web site: *www.asus.com.tw*

/SUS®

iPanel™ Family
Smart Information Panel
User's Guide

Manual Revision 1.01

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Introduction

The ASUS® iPanel™ Smart Information Panel adds flexibility to your computer by providing fast and easy access to I/O devices such as USB, Serial, Audio, and IrDA. The user-configurable hotkeys for quick access to your favorite computer applications adds to its versatility.

And to keep that high-power computer running at its peak while keeping maintenance cost to a minimum, the iPanel provides PC health monitoring at your fingertips by bringing you instant access to system status information as POST (Power-On Self Test) messages, CPU/system temperature, voltages, and fan rotation speeds – all at the touch of a button.

The iPanel fits snugly into a spare 5.25" drive bay in your computer and its specially developed software enables you to personalize the configurable hotkeys.

Efficient and user-friendly, the iPanel is the ultimate solution to easy connectivity and one touch PC management.

Product Specifications

Two iPanel models are available to suit your PC needs:

• **iPanel Basic** caters to mainstream users who want convenient access to the USB device and to daily computer operations as web browsing and email.

• **iPanel Deluxe** caters to more advanced users by providing additional access to audio and serial ports.

Features

- System Status Detection and Display
  1) **Temperature:** Allows efficient monitoring of system (CPU and motherboard) temperature to prevent system overheat and prolong PC performance.
  2) **Voltage:** Efficient monitoring of PC voltage (Vcore, +3.3V, +5V) ensures that power supply is within the optimal voltage range.
  3) **Startup Diagnostics:** Allows you to detect problems during the POST (Power-On Self Test) routines through the displayed diagnostic codes.

  4) **System Working Frequency:** Displays the current FSB (or external), CPU Bus, and memory frequencies.
  5) **System Fan Rotation Display:** Allows efficient monitoring of fan rotation speeds (measured in Rotations Per Minute or RPM) to determine the health status of the system fans for CPU, power supply, and chassis.

- User-configurable Hot Keys

- Front Panel Connectivity
  1) 2 **USB Ports**
  2) 1 **Serial Port** (Deluxe model only)
  3) 3 **Audio Jacks** (Deluxe model only) for Microphone , Line In, and Line Out
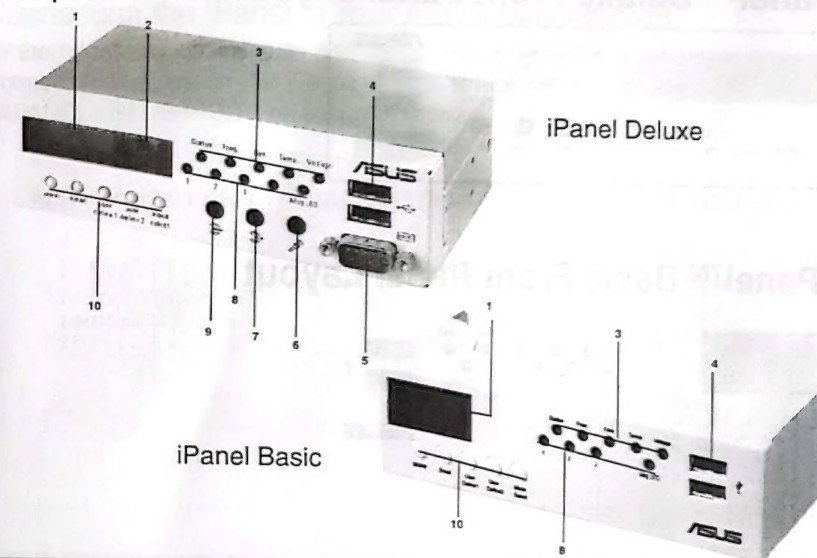 4) 1 **IrDA Module** (Deluxe model only).

System Requirement
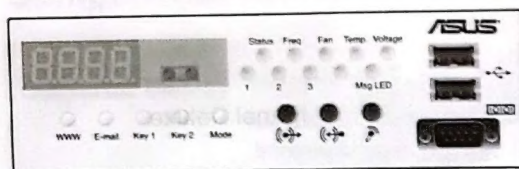
The iPanel may only be used with ASUS motherboards.

Components

Component Locations

iPanel Deluxe

iPanel Basic

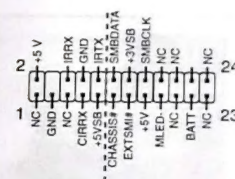## iPanel™ Deluxe Front Panel Layout
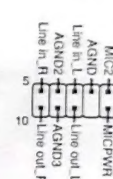

iPanel™ Basic Front Panel Layout

Connecting the iPanel to Your ASUS Motherboard

All the necessary components and cables are contained in your iPanel package. Connect the cables on the iPanel to their corresponding connector (AFPANEL, AAPANEL and USBPORT) on your motherboard.
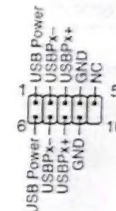
AFPANEL (24-1 Pins)   AAPANEL(10-1 Pins)   USBPORT(10-1 Pins)
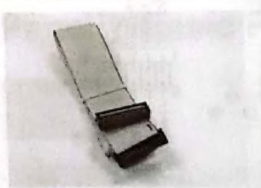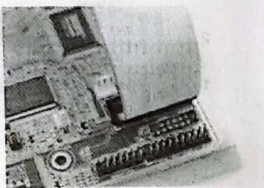
iPanel™ Deluxe Cable Connection

The iPanel package comes with a set of cables which you can readily install in your iPanel unit, and a COM Port bracket for motherboards with no VGA connector:
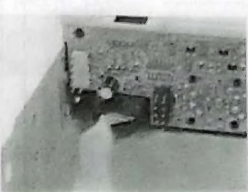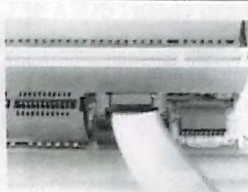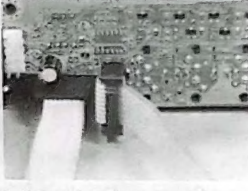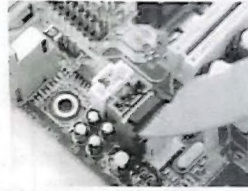
- •AFPanel Cable
- •AAPanel Cable*
- •COM Port Cable*
- •USB Cable
- •COM Port Bracket*

The following table shows the various cables used in the iPanel and where to connect them accordingly.

AFPanel Cable	AFPanel Cable on iPanel	AFPanel on motherboard

The cables connect only in one specific orientation. Match the missing pin/s on the iPanel connector/s to the plugged hole on the respective cable/s.

COM Port cable* (connected to iPanel unit upon purchase.)		
	COM Port on iPanel	COM Port on motherboard
AAPanel Cable*	AAPanel Cable on iPanel	AAPanel on motherboard

*Used only for the iPanel Deluxe model.

USB Cable	USB Header on iPanel	USB Header on motherboard
COM Port Cable* for motherboards with no VGA	COM Port Cable on Bracket*	COM Port on motherboard
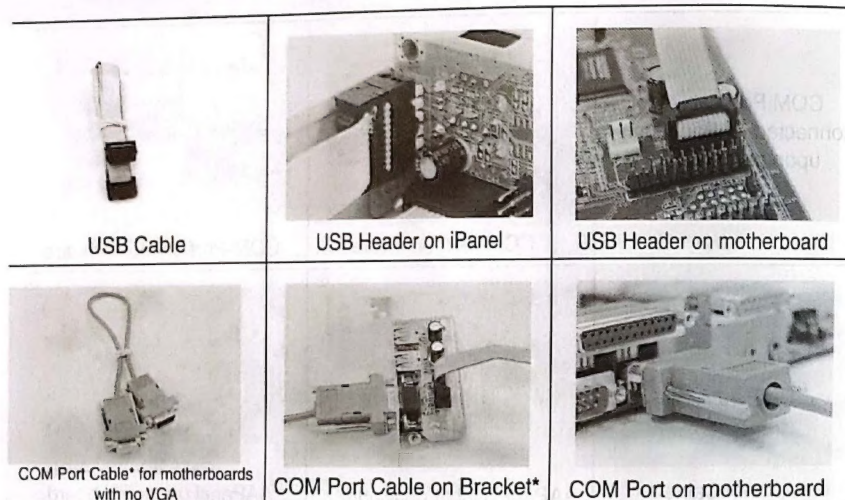
*Used only for the iPanel Deluxe model.

Software Installation

The iPanel also features the ASUS Hotkey application. The ASUS Hotkey provides easy access to two popular computer functions: web browsing and email; and two user-configurable hot keys allows you to easily launch software applications.

Requirements

- Windows 98/2000/ME or later
- ASUS motherboard with iPanel Support (e.g., ASUS CUSL2, TUSL2, etc.)

Starting Windows

When starting Windows for the first time after installing your motherboard, Windows will detect all Plug-and-Play devices. Follow the Add New Hardware Wizard to install all necessary device drivers.

Installing ASUS Hotkey

Insert the iPanel support disk that came with the iPanel into your drive and double-click or run **A:\SETUP.EXE**. Follow all the online prompts and/or onscreen instructions until you finish the setup process.

Uninstalling

- Use Windows Add/Remove Programs utility to uninstall ASUS Hotkey. See the *Windows Help* application screen and/or related documentation for more information.

iPanel Update Timer [Disabled] in ASUS motherboard BIOS

If you have installed the ASUS iPanel and wish to activate the hardware monitoring feature, [Enable] the parameter "I-Panel Update Timer" under the I/O Device Configuration in BIOS. This function allows the iPanel to update the system status indicator every five seconds. Configuration options: [Disabled] [Enabled]

iPanel Update Timer in BIOS

```
                        AwardBIOS Setup Utility
   Advanced

        I/O Device Configuration                    Item Specific Help

  Onboard FDC Swap A & B              [No Swap]      <Enter> to select if
                                                     switch drive letter
  Onboard Serial Port 1              [3F8H/IRQ4]     assignments or not.
  Onboard Serial Port 2              [2F8H/IRQ3]
  UART2 Use Infrared                 [Disabled]

  Onboard Parallel Port              [378H/IRQ7]
  Parallel Port Mode                 [ECP+EPP]
  ECP DMA Select                     [3]
  I-Panel Update Timer               [Disabled]

 ► Onboard Peripheral Resource Control

  Onboard CIR I/O                    [Disabled]


  F1   Help    ↑↓  Select Item   -/+    Change Values        F5   Setup Defaults
  ESC  Exit    ←→  Select Menu   Enter  Select ► Sub-Menu    F10  Save and Exit
```

ASUS Hotkey

After installing ASUS Hotkey, you will find the hotkey icon 🔲 on the taskbar status area. Clicking or right-clicking this icon launches the ASUS Hotkey application, which shows the menu to set up the different functions of your ASUS iPanel.

Add a Hotkey
Delete a Hotkey
Edit Hotkey Content
Enable All Hotkey
Disable All Hotkey
Delete All Hotkey

Drop-down menu box listing the default **ASUS iPanel** hot keys and user-configurable hot keys (**Normal Hotkey**, see opposite page for sample).
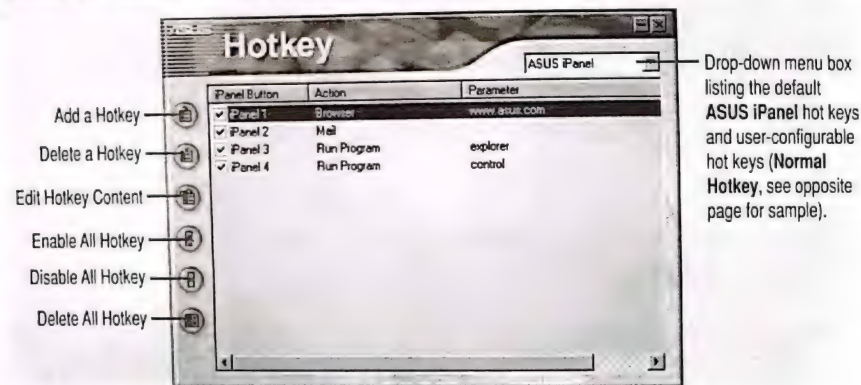
Normal Hotkey
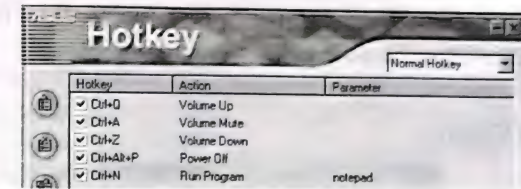
Adding Hotkeys
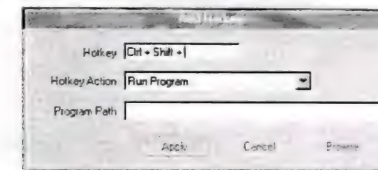
To add a hotkey, click the **Add a Hotkey** button from the menu to bring up the Add Hotkey dialogue box. Place your cursor on the *Hotkey* box, and press the hotkey combination (use any of the CTRL+, ALT+ or SHIFT+ key combinations), plus any valid key (except ESC, ENTER, TAB, SPACEBAR, PRINTSCREEN, or BACKSPACE) of your choice. Click **Apply** to save the changes.

Select the desired *Hotkey Action*, and if necessary, the *Program Path* (click **Browse** to locate) to indicate the desired location on your drive.

Changing Hotkeys
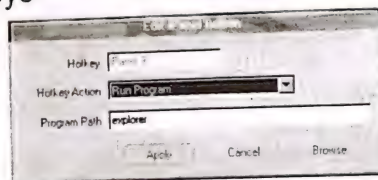
From the menu, double-click the iPanel button or hotkey that you wish to change. Follow the procedure in adding hotkeys.

System Status Display Definitions

The iPanel defaults to POST diagnostics during startup. Pressing the **Mode** button on the front panel starts the other system status displays. The table on the next page lists and describes the System Status LEDs and Secondary LEDs. The POST Diagnostic Codes appear in the POST Diagnostic Display area (see *Components* on p.6 and *Codes Description* on p.21).

NOTE

The iPanel only displays a particular message if your system has the particular device connected to it (e.g., the power supply fan temperature is shown only if there is a sensor connected to the fan connector on your motherboard).

SYSTEM STATUS LED		SECONDARY LED	DESCRIPTION
1.	Startup Diagnostics: **Status**		(see POST Diagnostic Code Descriptions on p.21)
2.	System Working Frequency: **Freq**	1 2 3	CPU Frequency FSB Frequency Memory Frequency
3.	System Fan Rotation Display: **Fan**	1 2 3	CPU Fan RPM Power Supply Fan RPM Chassis Fan RPM
4.	Temperature: **Temp**	1 2 3	CPU Temperature Power Supply Temperature Chassis Fan Temperature
5.	Voltage: **Voltage**	1 2 3	CPU Core Voltage +3.3V +5V

POST Diagnostic Code Descriptions

01	Reserved
02	Reserved
03	Initialize EISA registers (EISA BIOS only)
04	Reserved
05	Keyboard controller self-tested
06	Reserved
07	Verify CMOS Read/Write
09	ASUS-specific initialization; Configure Cyrix CPU register
0A	Issue CPU ID instruction; Initialize the first 32 interrupt vectors, initialize Int. 33 to 120, power management initialization
0B	PnP initialization; verify the RTC time, detect bad battery, read the CMOS data into the BIOS stack area, assign I/O and memory for any PCI devices
0C	Initialization of BIOS data area
0D	Program some of chipset's value; Measure the CPU for display, initialize the video

0E	Initialize APIC (multiprocessor BIOS only); Show startup screen message
0F	DMA channel 0 tested
10	DMA channel 1 tested
11	DMA page registers tested
12	Reserved
13	Reserved
14	Test 8254 0 counter 2
15	Test 8259 interrupt mask bit for channel 1
16	Test 8259 interrupt mask bit for channel 2
17	Reserved
19	Test 8259 functionality
1A	Reserved
1B	Reserved
1C	Reserved
1D	Reserved

1E	If an EISA NVM
1F–29	Reserved
30	Get size of base and extended memory
31	Test base and extended memory, Test base memory from 256K to 640K, test extended memory above 1MB
32	Test all onboard super I/O ports
33	Reserved
3A	Reserved
3B	Reserved
3C	Set flag to allow CMOS setup utility
3D	Install PS/2 mouse
3E	Try to turn on level 2
3F	Reserved
40	Reserved
41	Initialize floppy drive controller
42	Initialize hard drive controller
43	Initialize serial & parallel ports (PnP BIOS only)

45	Initialize math coprocessor
46–4D	Reserved
4E	Show all error messages on screen
4F	Ask for password, if needed
50	Write all CMOS values located in the BIOS stack back to CMOS
51	Reserved
52	Initialize all ISA ROM's; PCI initializations (PCI BIOS only), PnP initialization (PnP BIOS Only), setup shadow RAM, initialize power management
53	If not PnP BIOS, initialize ports; Initialize time in BIOS data area
54–5F	Reserved
60	Setup virus protection for the boot sector
61	Try to turn on level 2 cache
62	program numlock & typematic speed
63	Boot system via Int 19h
B0	Unexpected interrupt in protected mode

B1	Unclaimed NMI occurred
BE	Program defaults into chipset
BF	Program remaining chipset values
C0	Init. all standard devices with defaults
C1	Auto detect on-board DRAM & cache
C3	Test first 26K DRAM
C5	Copy ROM BIOS to E000-FFFF
FF	System booting

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